

**What Is Claimed Is:**

1. A system for using a metadata to flexibly analyze data stored in a plurality of source databases comprising:

the metadata containing technical information and business model information and existing independently of schemata of the plurality of source databases and a plurality of destination databases; and

a metadata management system comprising (1) a mapping means capable of mapping schemata of the plurality of source databases to dimensions and measures in the metadata based on the technical information, (2) a modeling means capable of manipulating the business model information, and (3) a loading means capable of loading the data stored in the plurality of source databases into the plurality of destination databases for analyses based on the technical information and the business model information stored in the metadata.

2. The system according to claim 1, wherein the metadata management system further comprises a destination database management means capable of periodically updating the plurality of destination databases.

3. The system according to claim 1, wherein the plurality of source databases includes a relational database, a flat file, a spreadsheet, and a file created by a third-party application.

4. The system according to claim 1, wherein the plurality of destination databases includes a relational database and a multi-dimensional database.
5. The system according to claim 1, wherein the plurality of source databases is a relational database and the plurality of destination databases is a multi-dimensional database.
6. The system according to claim 1, wherein the modeling means further includes a customization means allowing a user to customize a hierarchical tree structure of dimensions or to modify an existing hierarchical tree structure.
7. The system according to claim 1, wherein the modeling means further includes a ranking means allowing a user to rank one or more dimensions based on their value
8. The system according to claim 1, wherein the mapping means further includes a time-axis customization means allowing a user to specify a structure of a time axis.
9. The system according to claim 1, wherein the loading means generates one or more programs based on the technical information and the business model information stored in the metadata.

5           10.     The system according to claim 1, wherein the loading means uses one or more programs.

11.     The system according to claim 1, wherein the metadata management system further comprises an aggregation means capable of automatically aggregating the data loaded into  
10 the plurality of destination databases based on the technical information and the business model information in the metadata.

12.     A method of flexibly analyzing data in a plurality of source databases by using a metadata comprising the steps of:

maintaining the metadata, wherein the metadata includes technical information and business model information and exists independently of schemata of the plurality of source  
5 databases and of a plurality of destination databases;

mapping the schemata of the plurality of source databases to dimensions and measures in the metadata based on the technical information stored in the metadata;

manipulating the business model information stored in the metadata; and

applying the technical information and the business model information stored in  
10 the metadata to load data in the plurality of source databases into the plurality of destination databases for analyses.

13. The method according to claim 12, further comprising the step of periodically updating the plurality of destination databases.

14. The method according to claim 12, wherein the plurality of source databases includes a relational database, a flat file, a spreadsheet, and a file created by a third-party application

15. The method according to claim 12, wherein the plurality of destination databases includes a relational database and a multi-dimensional database.

16. The method according to claim 12, wherein the plurality of source databases is a relational database and the plurality of destination databases is a multi-dimensional database.

17. The method according to claim 12, further comprising the step of constructing a hierarchical tree structure of dimensions in the metadata.

18. The method according to claim 12, further comprising the step of ranking one or more dimensions in the metadata based on their values.

19. The method according to claim 12, further comprising the step of creating a customized time axis.

20. The method according to claim 12, wherein the applying step uses one or more programs generated based on the technical information and the business model information to load the data in the plurality of source databases into the plurality of destination databases for analyses.

21. The method according to claim 12, wherein the applying step uses one or more programs to load the data in the plurality of source databases into the plurality of destination databases for analyses.

22. The method according to claim 12, further comprising the step of aggregating the data loaded into the plurality of destination databases based on the technical information and the business model information in the metadata.

23. An apparatus for executing commands to use a metadata to flexibly analyze data stored in a plurality of source databases, comprising:

a first set of computers, each computer having a data storage device coupled thereto, wherein the plurality of source databases is stored in the data storage device of the first

5 set of computers;

the metadata stored in a second set of computers wherein the metadata includes technical information and business model information and exists independently of schemata of the plurality of source databases and a plurality of destination databases;

10 a third set of computers, each computer having a data storage device coupled thereto, wherein the plurality of destination databases is stored in the data storage device of the third set of computers; and

15 a fourth set of computers for use by a user to analyze the data stored in the plurality of source databases using the metadata and a metadata management system, wherein the metadata management system comprises one or more computer programs for mapping the schemata of the plurality of source databases to dimensions and measures in the metadata based on the technical information, manipulating the business model information, and loading the data stored in the plurality of source databases into the plurality of destination databases for analyses based on the technical information and the business model information stored in the metadata,

20 wherein the first set of computers, the second set of computers, the third set of computers, and the fourth set of computers are interconnected by a network.

24. The apparatus according to claim 23, wherein the first set of computers and the second set of computers are the same.

25. The apparatus according to claim 23, further comprising one or more programs, performed by the second set of computers, for periodically updating the plurality of destination databases.

26. The apparatus according to claim 23, wherein the plurality of source databases includes a relational database, a flat file, a spreadsheet, and a file created by a third-party application.

27. The apparatus according to claim 23, wherein the plurality of destination databases includes a relational database and a multi-dimensional database.

28. The apparatus according to claim 23, wherein the plurality of source databases is a relational database and the plurality of destination databases is a multi-dimensional database.

29. The apparatus according to claim 23, wherein the one or more programs are also capable of constructing a hierarchical tree structure of dimensions in the metadata.

30. The apparatus according to claim 23, wherein the one or more programs are also capable of creating a time axis to be used in analyses of the data.

31. The apparatus according to claim 23, wherein the one or more programs are also capable of ranking dimensions in the metadata according to their values.

32. The apparatus according to claim 23, wherein the metadata management system further includes one or more programs to automatically generate codes based on the technical information and the business model information for loading the data stored in the plurality of source databases into the plurality of destination databases for analyses.

33. The apparatus according to claim 23, wherein the metadata management system further includes one or more programs for loading the data stored in the plurality of source database into the plurality of the destination database for analyses.

34. The apparatus according to claim 23, wherein the metadata management system further comprises one or more programs to aggregate the data loaded into the plurality of destination databases based on the technical information and the business model information in the metadata.

35. An article of manufacture comprising a program storage medium readable by a computer and embodying one or more instructions executable by the computer to perform method steps for executing a command to use a metadata to flexibly analyze data in a plurality of



source databases, the method comprising the steps of:

5                   maintaining the metadata, wherein the metadata includes technical information and business model information and exists independently of schemata of the plurality of source databases and of a plurality of destination databases;

                  mapping the schemata of the plurality of source databases to dimensions and measures in the metadata based on the technical information stored in the metadata;

10                   manipulating the business model information stored in the metadata; and

                  applying the technical information and the business model information stored in the metadata to load data in the plurality of source databases into the plurality of destination databases for analyses.

36.     The article of manufacture according to claim 35, wherein the method further comprises the step of aggregating the data loaded into the plurality of destination databases based on the technical information and the business model information in the metadata.